FRBR for Serials:
Rounding the Square to Fit the Peg

Various presentations given and papers published over the past few years have addressed the issue of applying FRBR to serials. Each has started with the premise that FRBRizing serials cataloging is a good idea, but for the most part, all attempts have ended with the conclusion that serials don't quite fit into the FRBR model. Creating separate usable work, expression, and manifestation level records is not possible. This proposal turns the cart around. Instead of attempting to make serials fit the FRBR model we make FRBR fit the serials publishing reality. As such, this proposal begins with a redefinition of the FRBR concept of work, and for purposes of cataloging, introduces the idea of a "work segment" record. The FRBR definitions of expression, manifestation, and item do not change. The end result is two practical applications: a potential serial authority structure and a possible serial bibliographic cataloging framework. Application of each resolves a variety of existing and emerging bibliographic control problems. These include creating a more holistic presentation of the historical run of a serial through its various title incarnations, limiting the proliferation of and need for uniform titles as distinguishing elements, reducing cataloging workloads, and improving bibliographic displays and navigation.

The information that follows is in three parts. The first part gives the new definition of the serial work; the second presents the proposed serial authority structure, and the third covers the proposed serials cataloging concept of the work segment record.

Part I: Definition

Work: The historical run of a serial, through its various major changes.

Frieda Rosenburg and others have discussed the problem with the FRBR model not readily accounting for the relational historical run of a serial through its various title incarnations, i.e. title changes. In response, they have put forth the concept of the "superwork," adding a fifth layer to the FRBR hierarchy. This proposal addresses the same issue by defining the concept of the "work" to be the entire historical run of the serial to begin with. As you will see below, this proposal does not just "shift" the hierarchy down, but rather reconstructs the FRBR hierarchy for the serials universe by parceling that universe differently. A major change, which FRBR considered a new work, is considered only for purposes of determining when a "work segment" record is created.

Part II: Serial Authority Structure

The above definition of the FRBR work allows for two practical applications: a serial authority record structure and a new cataloging framework. In presenting the authority structure, the use of specific tags, fields, and subfields in the examples below, while illustrative, are not proscriptive. Further development of this proposal will determine the final tags, fields, and subfields used.

The core components of the proposed serial authority record are three:

1. A standard identifier, preferably numeric.
2. Authorized headings for each authorized form of a title accounting for each work segment (i.e. major change) of a serial through its historical run, preferably with their corresponding spans of issuance/designations.
3. Linking entries to other serials for tracking relationships resulting from splits, mergers, absorptions, and separations.

Here is an abstract presentation of the above:

X2X _ _ Work identifier

1XX _ _ Work segment Title A $d Beginning and ending designations
1XX _ _ Work segment Title B $d Beginning and ending designations
1XX _ _ Work segment Title C $d Beginning and ending designations
1XX _ _ Work segment Title D $d Beginning and ending designations

5XX _ _ Work segment Title X $d date of split, merger, absorption, or separation
5XX _ _ Work segment Title Y $d date of split, merger, absorption, or separation

In this abstraction, the X2X contains the standard identifier, the 1XX fields record, in chronological issuance sequence, the work segments, and the 5XXs represent linking entries due to splits, mergers, absorptions, or separations.

Example using a real serial:

022 _ _ $l 1234-5678
130 _ 1 $t Monthly business review (Atlanta, Ga.) $d v.5, no. 8 (Aug. 25, 1920)-v.12, no.6 (June 30, 1927)
130 _ 1 $t Monthly review of agricultural, industrial, trade and financial conditions in the Sixth Federal Reserve District $d v.12, no.7 (July 1927)-v.15, no.2 (Feb. 28, 1930)
130 _ 0 $t Monthly review of financial, agricultural, trade and industrial conditions in the Sixth Federal Reserve District $d v.15, no.3 (Mar. 31, 1930)-v.22, no.4 (Apr. 30, 1937)
110 2 1 $a Federal Reserve Bank of Atlanta $t Monthly review - Federal Reserve Bank of Atlanta $d v.22, no.5 (May 31, 1937)-v.62, no. 4 (Apr. 1977)
130 _ 1 $t Economic review (Federal Reserve Bank of Atlanta) $d May/June 1977-
580 1 5 $t Caribbean basin economic survey $x 0196-9676 $d Apr. 1981

In this example, the 022 is a made up number, but could this be our current linking ISSN? Or is the definition of the linking ISSN set to the degree that it could only be associated with the 1XX entries? The field tags used are 130and 110 reflecting past practice of using the X30 for controlled titles and X10 for corporate name entries. The second indicator value is coded as "1," illustrating a potential way to code for displaying the entry as a hot link or not (see display example below). A 580 is used to parallel current 780/785 usage, and the second indicator value codes this entry as being an absorption, again using parallel coding from 780/785 usage. For the 5XX, the first indicator value controls display.

One potential benefit of using this authority structure is it could allow the following type of user display.

Your title, **Monthly review of agricultural, industrial, trade and financial conditions in the Sixth Federal Reserve District**, is published as:

Monthly business review (Atlanta, Ga.) from v.5, no. 8 (Aug. 25, 1920)-v.12, no.6 (June 30, 1927)
Monthly review of agricultural, industrial, trade and financial conditions in the Sixth Federal Reserve District from v.12, no.7 (July 1927)-v.15, no.2 (Feb. 28, 1930)
Monthly review of financial, agricultural, trade and industrial conditions in the Sixth Federal Reserve District from v.15, no.3 (Mar. 31, 1930)-v.22, no.4 (Apr. 30, 1937)
 Monthly review - Federal Reserve Bank of Atlanta from v.22, no.5 (May 31, 1937)-v.62, no. 4 (Apr. 1977)
Economic review (Federal Reserve Bank of Atlanta) from May/June 1977-

and absorbed the following:

> Caribbean basin economic survey in Apr. 1981

In this display example, the indicator value codings in the authority record example above causes the display entries to be hot link or not, depending on whether a library owns or not a specific title. In a library's copy of the serial authority record, the third entry is coded so that the title isn't hot linked. Other pluses for this type of display are that its addresses public services complaints of links in bibliographic records linking only to previous and later titles and of users not getting the entire publication history of a serial for when the citation they have is for a volume not within the range of volumes of the title they search.

Part III: Cataloging Framework

Past attempts to develop FRBR catalog records for serials have done so by creating either a serial work record or a serial expression level record. Taking inspiration from Martha Yee's recent ALA midwinter presentation and a recently published paper by Everett Allgood, this proposed serials cataloging framework doesn't attempt to create either an expression or manifestation level record, but rather blends both into a "work segment" record. A significant reason for doing so is a resulting labor savings, but also, it pushes the questions "Given the data recorded and user needs, do we need separate expression and manifestation level records, is having expression and manifestation level data in a single record such a bad thing, especially if there are labor savings and user service advantages to be gained by combining them in one record?" In addition, notwithstanding the value of letters to the editors, advertisements, commentaries, etc. , this cataloging structure is premised on the idea that for serials, users are interested in content foremost and less concerned with the packaging, the format. Also, with regards to language editions, the proposal posits that a translation is still fundamentally the same intellectual content as the original.

Keeping in mind the above we would create a record following current rules incorporating the following guidelines.

1. Record the ISSNs for each format of a work segment in repeated 022 fields. Add a parenthetical for each format if known.
2. Record the title in the 245. If it differs from the work segment title as found in the serial authority record, also record the work segment title in a 130 field. For the 245, prefer the title of the print version if in hand or known from another source. Absent the print version title, prefer the title of a physical version over an online version.
3. Record title variants from all formats of the work segment in 246s, use $i for addition clarity when recording variants from various formats.
4. In the 260, record the publication information for the original manifestation. When print is known to exist, always consider it the original manifestation. In case of doubt between other physical versions and online version, prefer the physical version. Record publication data for additional formats in a 533 note. If additional publication data needs to be recorded, record it in a note in the style: [format] issued by: [alternate issuing body data]. Do not record issuing data for third party, online providers.
5. When a specific format ceases to be issued but the publication continues to be published in other formats, do not close out the record, instead, provide the data in a note: e.g. 500   Print publication ceased with [designation].
6. All 856 for the online versions are coded as 856 40s.

Example (not all fields have been transcribed from the original OCLC records)

Rec stat   c   Entered: [varies]   Replaced: [varies]

Type	a	*ELvl*	_	Srce	d	*GPub*	*f*	Ctrl	_	Lang	eng
BLvl	s	*Form*	_	*Conf*	*0*	*Freq*	*q*	MRec	_	*Ctry*	*gau*
S/L	0	*Orig*	_	*EntW*	_	Regl	r	*Alph*	*a*		
Desc	*a*	SrTp	p	Cont	s	*DtSt*	*c*	*Dates*	*1977 ,*	*9999*	

3 → 006 _ _ m   d f
5 → 006 _ _ m   d f
    007 _ _ c $b r $d c $e n $f u $g nnn $h a $i u $j u $k a $l u
    007 _ _ c $b o $d b $e g $f _
    007 _ _ h $b e $d b $e m $f b024 $g b $h a $i c $j c
4 { 007 _ _ h $b e $d a $e m $f u - - - $g b $h a $i u $j a
    007 _ _ h $b e $d a $e m $f u - - - $g b $h a $i u $j a
    007 _ _ h $b d $d a $e f $f b - - - $g b $h u $i u $j u
1 { 010 _ _ 82941989
    016 7 _ 101092940 $2 DNLM
    022 _ _ 0732-1813 $b print $2 1
1 → 030 _ _ ECRWDA   ← $b from5
$a nsdp 1 → *042 _ _ lc $a nsdp*
    043 _ _ n-usu-- $a n-us---   ← $a n-usu-- 1
indicators 1 → *050 0 0 HC107.A13 $b E186*
3 { 050 _ 4 HC1 $b .E19
    082 0 4 332.1/1/0973
    082 0 4 339.07205
    082 0 4 070.572
4 → 090   HA214 $b .A1842 no. 9371-1
    130 0 _ Economic review (Federal Reserve Bank of Atlanta)
    210 0 _ Econ. Rev. $b (Atlanta Ga.)
    222 _ 0 Economic review $b (Atlanta, Ga.)
    245 *1* 0 Economic review / $c Federal Reserve Bank of Atlanta
    260 _ _ Atlanta, Ga. : $b Federal Reserve Bank of Atlanta, $c 1977-
    300 _ _ v. : $b ill. ; $c 27 cm.
    310 _ _ Quarterly, $b <First Quarter 199/>-
    321 _ _ Bimonthly, $b May/June 1977-Mar./Apr. 1981   }
    321 _ _ Monthly, $b May 1981-Oct. 1986   } Monthly designations from 4
    321 _ _ Bimonthly, $b Nov./Dec. 1986-Mar./Apr. 1996   }
    362 0 _ Vol. 62, no. 5 (May/June 1977)-
    500 _ _ Description based on print: Vol. 66, no. 5 (Aug. 1981); title from cover.
5 { 500 _ _ Print ceased with v. 92, no. 4 (Fourth Quarter 2007).
    500 _ _ Latest issue consulted: print, v. 92, no. 4 (Fourth Quarter 2007).
4 { 510 3 _ Lexis/Nexis statistical; American statistics index. Abstracts.
    515 _ _ The Dec. 1996 issue combines vol. 81 nos. 3-6.
5 { 530 _ _ Issued in print, CD-ROM, microfiche, microfilm, and online.
    533 _ _ CD-ROM. $e CD-ROMs ; 4 3/4 in.
    533 _ _ Microfiche. $m Jan. 1973- $b Bethesda, MA. : $c Congressional Information Service, Inc., $d 1973- $e microfiches : negative. $f (ASI ; 9371-1)
4 { 533 _ _ Microfiche. $b Ann Arbor, Mich. : University Microfilms International. $e microfiches.
    533 _ _ Microfiche. $b Wooster, Ohio : $c Bell & Howell. $e microfiches.
    533 _ _ Microfilm. $b Ann Arbor, Mich. : University Microfilms International. $e microfilm reels ; 35 mm.
2 → 580 _ _ In: Business periodicals ondisc.
    651 _ 0 Southern States $x Economic conditions $v Statistics $v Periodicals.   ← $v Statistics from 4

651 _ 0 United States $x Economic conditions *$y 1971-*1981 $v Periodicals. ← "1981" from 4

650 _ 0 Banks and banking $z United States $v Statistics $v Periodicals. ← $v Statistics from 4

650 _ 0 Federal Reserve Banks $v Periodicals.

[4] → 650 _ 0 Prices $z United States $v Statistics $v Periodicals.

710 2 _ Federal Reserve Bank of Atlanta

[2] → 773 1 _ $7 nnms $t Business periodicals ondisc $w (OCoLC)24399466

780 0 0 *Federal Reserve Bank of Atlanta. $t Monthly review - Federal Reserve Bank of Atlanta $x 0014-9144*

$w(DLC) [1] → $w (DLC) sn 85005243 $w (OCoLC)4966238

780 0 5 $t Caribbean basin economic survey $w (DLC) 85645383 $w (OCoLC)3597369

[4] → 830 _ 0 ASI microfiche library. $p Non-depository collection ; $v ASI 9371-1.

Indicator coding 5 {
856 4 0 $u *http://bibpurl.oclc.org/web/22274* $u *http://www.frbatlanta.org/publica/pubs_pubs_pubrouter.cfm?pub_type=ECONOMIC%20REVIEW*

856 4 0 $u http://search.ebscohost.com/login.aspx?direct=true&db=buh&jid=FRA&site=ehost-live

856 4 0 $u http://gateway.proquest.com/openurl?ctx%5Fver=Z39.88-2003&res%5Fid=xri:ItemLocation:pqd&rft%5Fval%5Ffmt=ori:fmt:kev:mtx:journal&genre=journal&req%5Fdat=xri:pqil:pq%5Fclntid=58117&res%5Fdat=xri:pqil:res%5Fver=0.2&svc%5Fid=xri:pqil:context=title&rft%5Fid=xri:pqd:PMID=24512
} $u from3

[1] {
891 0 3 $9 853 $8 1 $a v. $b no. $u var $v r $i (year) $j (month) $w m $x 01

891 4 0 $0 863 $8 1 $a <74>- $i <1989>- $x provisional
}

For a version of this record that is in black and white and with labeled fields, please see: Please see
http://www.loc.gov/acq/conser/FRBR-for-serials-BW.pdf

For the above title, there are at least eight records in OCLC: 2 print (OCLC #3107655, 37894513), 1 CD-ROM (#35157839), 4 microform (#56907046, #9934318, #14393732, #5544612), and 1 online (#60637534). In the above example, the data in red (**fields labeled superscript #1**) represents the data found only in the print records. The data in blue (**superscript #2**) comes from the CD-ROM record. The data in green (**superscript #3**) is from the online record. The data in orange (**superscript #4**) is found in the microfiche record. Data add for clarification or repurposed for use in this merged record is seen in purple (**superscript #5**). The remaining data in black represents data found in two or more records and if italicized, found in some but not all records. To emphasize the commonality of records, or perhaps, to emphasize the lack of commonality, here are the only data elements shared by every record.

Rec stat c	Entered: [varies]	Replaced: [varies]

Type a		Srce d		Ctrl _	Lang eng
BLvl s				MRec _	
S/L 0		Regl r			
	SrTp p				

043 _ _ $a n-us---
130 0 _ Economic review (Federal Reserve Bank of Atlanta)
245   0 Economic review / $c Federal Reserve Bank of Atlanta
321 _ _ Bimonthly, $b 1977-
651 _ 0 United States $x Economic conditions $v Periodicals.
650 _ 0 Banks and banking $z United States $v Periodicals.
650 _ 0 Federal Reserve Banks $v Periodicals.
710 2 _ Federal Reserve Bank of Atlanta

While we might argue about the ultimate utility of the data, this quickly illustrates how much data is not available for use among the various records. If our goal is to provide maximum access to content, the above shows how this new model helps us achieve that goal.

Another aspect of this example to highlight is that, in accordance with current cataloging practice, the original print record is closed out because it has ceased and is continued by the online version. The proposed model eliminates the need to do this as that change is made it a simple note and the problem of explaining to public services librarians and users why we have a continuation of a title by the same title is gone. This touches on all the linking field entries that we can avoid having to make between the current version records and the point that most of the records found in OCLC don't have the all the requisite linking fields to begin with.